

Typical Civil 3D Project Folder Structure

12345678: Project folder shall be the eight-digit design ID for the project.

_Shortcuts: This folder is the default system folder generated by Autodesk for managing shortcuts. Folders should never be created within this folder. Files should never be created or edited within this folder except through AutoCAD Civil 3D.

BaseData: This folder contains all of the inputs into the design. Common sources are survey, photogrammetry, GIS, and ortho photos. The current, complete files for the surface and topography for the project shall be at this folder level regardless of the source(s) that created those files.

Imagery: This folder contains ortho photos not from photogrammetry.

Mapping: This folder contains files received from Central Office Survey and Mapping (photogrammetry)

Orig: This folder contains the DGN files generated from Central Office Survey and Mapping (photogrammetry)

Raster: This folder contains the ortho photos or other images obtained from Central Office Survey and Mapping (photogrammetry)

Other: This folder contains vector data not from survey or photogrammetry.

Survey: This folder contains all Field survey data.

Orig: This folder contains the original field survey files.

ConstData: This folder contains design data exported into a format that can be used by construction contractors.

Design: This folder contains all of the files created and edited by design. Files at this level will not have civil 3D objects in them. They are logical groupings of project items seen in plan sheets.

AliProfs: This folder contains all of the stationing reference alignments and profiles for a project.

Corridors: This folder contains all of the corridors for the project.

AssemblySets: This folder contains the AssemblySet.xml file

Edgelines: Files with elements representing geometry that is not stationing alignments should be in this folder. Files can contain 2D or 3D elements and AutoCAD or Civil 3D objects. Examples of content that should be in this folder include proposed roadway elements, slope intercepts, and matchlines.

Quantities: This folder contains files used in Quantity Take Off, such as sample lines for generating earthwork quantities.

Surfaces: This folder contains all of the surfaces generated from design.

3DModelDeliverable: This folder contains the surfaces that construct the final 3D Model(s) output from design.

ViewFrameGroups: This folder contains standard view frame groups used by layouts throughout the plan.

XSections: This folder contains cross-section files. It should normally only contain cross-section sheets not generated for the plan set. Plan set cross-sections should be in the SheetsPlan folder.

Metadata: This folder contains the metadata sheet for the project and reports associated with the sheet.

RW: This folder contains all of the files created and used by right-of-way.

SheetsOther: This folder is a holding place for sheets generated that do not belong in the plan. These would include PIM displays, maps to be included in reports, maps sent to an external

customers, etc.

SheetsPlan: This folder contains the DWG files for all of the sheets in the plan and any files associated with plotting the plan sheets, such as DST or DSD files.

pdf: This folder contains PDF files created for plan submittals. Ex.
00000000_pln_30pct.pdf, 11302072_pln_pse_050916_1603.pdf.

Civil 3D Abbreviations and Acronyms for Files and Objects

This table contains standard abbreviations for use in naming Civil 3D files and objects. These abbreviations should be used when appropriate, but abbreviations not contained in this list are acceptable.

When using abbreviations, they should be mixed case and preferably no more than four characters. When using acronyms, they should be all-caps. For example abbreviating corridor results in Crdr. An acronym for proposed reference line results in PRL.

Abbreviation/A cronym	Full term	Abbreviation/ Acronym	Full term
Ali	Alignment	Off	Offset
Alt	Alternative	Out	Outside
Asmb	Assembly	PGL	Profile grade line (to be used when alignment with elevation set is different than the proposed reference line)
BG	Beam guard	PRL	Proposed reference line (to be used when an alignment is not the centerline or lane edge of a highway)
BL	Baseline (within a corridor. PRL should be used to designate a reference line)	Prof	Profile
CFL	Corridor feature line	Prop	Proposed
CR	Curb Return	PRW	Proposed right-of-way
Crdr	Corridor	R or Rt	Right
Cty	County	Rdbt	Roundabout
EP	Edge of pavement	Rfnt	Refinement
EPS	Edge of paved shoulder	Rg	Region
EGS	Edge of gravel shoulder	RL	Reference line
ERW	Existing right-of-way	Rmp	Ramp
ETW	Edge of travelled way	RW	Right-of-way
Ex	Exist/Existing	RM	Roadway model
Grdg	Grading	SD	Survey database
In	Inside	Sdwk	Sidewalk
Int	Intersection	Stg	Stage
Isld	Island	Surf	Surface
L or Lt	Left	Topo	Topography
Ln	Lane outside edge	Ult	Ultimate
Med	Median	Uti	Utility

Civil 3D File Naming Standard

Following are examples of both standard files and standard application of WisDOT abbreviations and acronyms to file names. File names and locations for existing data and plan sheets should be used exactly as seen here unless they do not meet project needs. File names for specific objects (such as corridors or alignment profile combinations) should begin with an object prefix and then the name of the object within the file.

Project ID data in full format or partial (last two digits of construction ID for instance) can be added as a prefix or suffix to file names as an option for organizing data. This option is not required or standard practice.

Alignments and Profiles

Name: AliProf-<Dominant Roadway Name>-<Comment>
Example: AliProf-12-BestFit.dwg
AliProf-CtyBB.dwg
Location: Proj ID\Design\AliProfs

Corridors

Description: Contains corridors
Name: Crdr-<CorridorName>-<Location>-<Comments>
Example: Crdr-12-Begin-To-WoodAveE.dwg
Crdr-12-WoodAveE-To-End.dwg
Crdr-Int-12-WoodAve.dwg
Location: Proj ID\Design\Corridors

Surfaces

Description: Current, complete existing surface
Name: Surf-<SurfaceName>-<Comments>
Example: Surf-Ex.dwg
Location: Proj ID\BaseData

Description: Refinement Surfaces
Name: Surf-<SurfaceName>
Example: (keeping all refinement surfaces in one file)
Surf-Rfnt-All-BaseCourse.dwg
Surf-Rfnt-All-Datum.dwg
Surf-Rfnt-All-Top.dwg
OR
(refinement surfaces separated)
Surf-Rfnt-12-Begin-To-WoodAveE-BaseCourse.dwg
Surf-Rfnt-12-Begin-To-WoodAveE-Datum.dwg
Surf-Rfnt-12-Begin-To-WoodAveE-Top.dwg
Surf-Rfnt-12-WoodAveE-To-End-BaseCourse.dwg
Surf-Rfnt-12-WoodAveE-To-End-Datum.dwg
Surf-Rfnt-12-WoodAveE-To-End-Top.dwg
Location: Proj ID\Design\Surfaces

Design files that are not object specific (these files can contain Civil and/or AutoCAD objects)

ProjID\Design\Edgelines\Pavt.dwg
ProjID\Design\Edgelines\Pavt-Joints.dwg
ProjID\Design\Edgelines\SI.dwg (slope intercepts)
ProjID\Design\Edgelines\PM.dwg (pavement marking)

Existing base data

Description: Existing topography. This file is the current, complete topography of the project excluding utilities, regardless of collection method.

Name: Topo-Ex.dwg

Location: Proj ID\BaseData

Description: Existing utilities

Name: Uti-Ex.dwg

Location: Proj ID\BaseData

Description: Existing Mapping topography. This file name is assigned by Central Office Mapping.

Name: M(flight name).dwg

Location: Proj ID\BaseData\Mapping

Description: Existing Survey topography. This file is a working file containing all of the field survey data for a project.

Name: Topo-Ex-Survey.dwg

Location: Proj ID\BaseData\Survey

Survey databases

Description: Field survey database.

Name: SD-<ProjID>(-<ConsultantName>).sdb

Example: SD-66660002.sdb

SD-66660002-FirmA.sdb

Location: Proj ID\BaseData\Survey

Survey text files

Description: Field survey text files.

Name: <ProjID> (-<ConsultantName>)-<work order>.xml

Example: 66660002-FirmA -wo02.xml

Location: Proj ID\BaseData\Survey

Plan Sheets (all files located in ProjID\SheetsPlan)

Sheet files should be named SSssPP-aa(#).dwg where:

SS is the numerical designation of the primary subject area of the plan sheet.

ss is the numerical designation of a subset of the subject area.

PP refers to the page number of the sheet. NOTE: If there are multiple layouts in the file, then the file name shall represent the first sheet in the file.

aa indicates an alpha abbreviation of the sheet name.

is an optional designation for staged work. For example, an erosion control sheet that was for the second stage of construction could be named 022004-ec2.dwg.

Sheet type	File name
Title Sheet	010101-ti
General Notes	020101-gn
Project Overview	020201-po
Typical Sections	020301-ts
Construction Details	021001-cd
Intersection Details	021101-id
Plan Details	021201-pd
Joint Details	021301-jd
Freeway Mgt System	021401-fm
Interchanges	021501-ic
Contour Maps	021601-cm
Cross Section Matchlines	021701-xm
Erosion Control	022001-ec
Erosion Control staged	022001-ec1
Storm Sewer Plan	022501-ss
Pipe Underdrain	022601-pu
Utility Plan	023001-up
Planting	023101-pl
Permanent Signing	023201-ps
Advanced Warning Signing	023301-aw
Lighting Removal	023401-lr
Lighting Temporary	023501-lt
Lighting Plan	023601-lp
Traffic Signal Removal	024001-sr
Traffic Signal Temporary	024101-st
Traffic Signal Plan	024201-sp
Traffic Signal Phasing	024301-ph
Cable Routing Chart	024401-cr
Pavement Marking	024501-pm
Traffic Control	025001-tc
Stage Construction	026001-s1
Stage Construction (additional)	026101-s2
Detours	027001-dt
Fencing	027101-fn
Alignment	027201-ad
Borings, Other, etc.	027301-xx
Estimate of Quantities	030101-eq

Miscellaneous Quantities	030201-mq
Right-of-Way Plat	040101-rp
Plan and Profile	050101-pp
Plan Sheets	050201-pn
Profiles	050301-pr
Line Diagram	050401-lt
Special Sign Details	070101-sd
Earthwork Quantities	090101-ew
Cross Sections	090201-xs
Access Control Plan	090301-ac

Other Plotted Items (all files located in ProjID\SheetsOther)

Description: Public Meeting Displays, other
Name: <Descriptive Name of Purpose and Content>
Example: Aug2010-PublicMtg-IntDetails.dwg

Right-of-way (all files located in ProjID\RW)

Description: Proposed right-of-way, TLE, PLE, etc.
Example: PRW.dwg

Description: Existing right-of-way
Example: ERW.dwg

Description: Right-of-way property lines (can also be stored in ERW.dwg)
Example: ERW-PL.dwg

Description: Right-of-way property pipes (can also be stored in ERW.dwg)
Example: ERW-PP.dwg

Description: Right-of-way section lines (can also be stored in ERW.dwg)
Example: ERW-SecLines.dwg

Civil 3D layout naming standard

Layouts used in the plan set should only be named with a leading zero sheet number within that subsection. If a file has more than 99 layouts, two leading zeros can be used. Layouts not used for the plan set should use standard abbreviations and acronyms in their names.

Example: A plan sheet file that contained a lighting plan with 4 sheets would be named 023601-lp.dwg. The layouts within the file would be named 01, 02, 03, 04.

A description suffix can be added to plan sheet layout names if desired.

Contractor data files

All files in the contractor data packet should be located in ProjID\ConstData

Data category	Example files
Field Control Data	Horiz & vert control, Benchmark, section corner ties
Existing Surface Data	ACAD-Surf-Ex.dwg, Surf-Ex.xml
Existing Topography - General	ACAD-Topo-Ex.dwg
Existing Topography - Utilities	ACAD-Topo-Uti.dwg
Reference Line Data	AliProfs.xml, Ali-12-desc.csv, Ali-16-desc.csv
Reference Profile Data	AliProfs.xml (same file as reference line data)
Superelevation Data	Ali-12-super.csv, Ali-16-super.csv
Right-of-Way Monumentation Data	PRW.xml, ERW.xml
Proposed Roadway Features	ACAD-Pavt.dwg
Proposed Surface Model	ACAD-Surf-BaseCourse.dwg, ACAD-Surf-BaseCourse-Bnd.dwg, ACAD-Surf-BaseCourse-Pnts-Lines.dwg, Surf-BaseCourse.xml, ACAD-Surf-Datum.dwg, ACAD-Surf-Datum-Bnd.dwg, ACAD-Surf-Datum-Pnts-Lines.dwg, Surf-Datum.xml, ACAD-Surf-Top.dwg, ACAD-Surf-Top-Bnd.dwg, ACAD-Surf-Top-Pnts-Lines.dwg, Surf-Top.xml
Proposed Cross Section Data	12-Begin-WoodAve-slp-stk.csv

Civil 3D Object Naming Conventions

Abbreviations and acronyms should be used when naming Civil 3D objects. This is because object names can become prefixes for other objects. For example, a profile can have a parent alignment prefix. Object names that are very long can also be difficult to use in certain short dialog boxes in the software. See Attachment 3.2 for standard abbreviations and acronyms. Civil 3D objects should not have a prefix containing the object type. This is unnecessary and can be confusing when object names are passed on to other objects. Hyphens should be used to make object names easier to read.

Another factor to consider when naming Civil 3D objects is their organization. Civil 3D objects are sorted alphabetically by object type within the Data Shortcuts in Civil 3D. Below are guidelines and examples for good object naming conventions in Civil 3D as they would be seen in Data Shortcuts.

Alignments

- Alignment types (Centerline, Offset, Curb Return, and Miscellaneous) are set by Civil 3D from the method that they were created. These values should not be changed. Changing alignment type can break intelligent connections in the case of Offset or Curb Return alignments and problems may occur in targeting these alignments in corridors changing any of the types.
- Road-based alignments should always start with the road number or name. Highways should start with only the number. This will put highways at the top of the list of alignments. County and local road alignments can be prefixed to keep them sorted in order.
- After the road number or name, location should be defined. Undivided highways should use left and right designations. Divided highways should use highway directions with inside and outside designations.
- Right-of-way alignments should be named with RW-<ERW, PRW, or Ult>-<Highway>-<Location>-<Comment>
Curb return alignments should be named with <Feature Span Type>-<Primary Road>-<Secondary Road>-<Location>-<Feature>

Undivided highway example (with edgelines, right-of-way, and utilities)	Divided highway example	Divided highway using PRL and PGL example
12	12-Med	12-PRL
16	12EB	12EB-PGL
12-L-EGS	12EB-In-EGS	12WB-PGL
12-L-EPS	12EB-In-EPS	
12-L-TrnLn	12EB-In-TrnLn	
12-R-EGS	12EB-Out-EGS	Ramp example
12-R-EPS	12EB-Out-EPS	(Rmp prefix)
12-R-TrnLn	12EB-Out-TrnLn	Rmp-A
Cty-BB	12WB	Rmp-B
Int-12-BB-NE-CG	12WB-In-EGS	Rmp-C
Int-12-BB-NW-CG	12WB-In-EPS	
Int-12-BB-SE-CG	12WB-In-TrnLn	OR(keeps ramps close to main alignment)
Int-12-BB-SW-CG	12WB-Out-EGS	
Lcl-WoodAve	12WB-Out-EPS	12
Lcl-RiverBendRd	12WB-Out-TrnLn	16
RW-ERW-12-L-WoodToBB	Cty-BB	94EB
RW-ERW-12-R-WoodToBB	Int-12EB-BB-NE-CG	94EB-Rmp-12-Ent
RW-PRW-12-L-WoodToBB	Int-12EB-BB-NW-CG	94EB-Rmp-12-Ext
RW-PRW-12-R-WoodToBB	Int-12EB-BB-SE-CG	94WB
RW-Ult-12-L-WoodToBB	Int-12EB-BB-SW-CG	94WB-Rmp-12-Ent
RW-Ult-12-R-WoodToBB	Lcl-WoodAve	94WB-Rmp-12-Ext
Uti-Elec-WoodCoop-2	Lcl-RiverBendRd	
Uti-Gas1		
Uti-Gas2		
Alternative example		Roundabout example
12		Rdbt-12-16-NE-CG
12-Alt1		Rdbt-12-16-NW-CG
12-Alt2		Rdbt-12-16-SE-CG
Cty-BB		Rdbt-12-16-SW-CG
Cty-BB-Alt4		

Profiles

- Profile names should begin with the parent alignment name. Descriptions should be added after.

Examples

12-Ex

12-Prop

12-PGL

12-L-Ditch

12EB-Med-Ditch

Int-12-CtyBB-NE-Prop

Assemblies

- Assembly names should describe the location where the assembly is to be used. Descriptive locations are preferred to station based locations to avoid confusion if the extents covered with the assembly change. Station based locations are acceptable. Intent of the assembly does not need to be included in the name.

Examples

12-Setup-Daylight-Sub
12-Int-WoodAve (mainline section of 12 going through the intersection with Wood Avenue)
12-L-Begin-To-WoodAve
12-R-Begin-To-YellowCreek
Int-12-WoodAve-NW (curb return quadrant at the intersection of 12 and Wood Avenue)
WoodAve

Subassemblies (inside an assembly)

- Subassemblies should be named with the original subassembly name, side, and with a suffix of a target object if one is used. Using an assembly prefix designation is a good practice. A counter number suffix may be necessary if the version of Civil 3D being used requires unique subassembly names.

Examples

GenCF-R-Dtch-Prof
CGGen
LnGeneric-L-TrnLn

Corridors

- Corridor names should begin with the alignment that most of the corridor is based on.
- Location information should be after the alignment. Descriptive locations are preferred to station based locations to avoid confusion if corridor limits change. Station based locations are acceptable.

Examples

12-Setup-Daylight-Sub
12-Begin-To-WoodAveE
12-WoodAveE-To-End

Surfaces

- Existing surfaces should be named "Exist" or begin with Ex.
- Design surfaces should be prefixed with their creation type (Corridor, Refinement, Grading, etc.).
- Corridor surfaces should be named Crdr-<Corridor Name>-<Surface type>.

Examples	
Crdr-12-Begin-To-WoodAveE-BaseCourse	Rfnt-12-Begin-To-WoodAveE-Top
Crdr-12-Begin-To-WoodAveE-Datum	Rfnt-12-WoodAveE-To-End-BaseCourse
Crdr-12-Begin-To-WoodAveE-PipeDatum	Rfnt-12-WoodAveE-To-End -Datum
Crdr-12-Begin-To-WoodAveE-Top	Rfnt-12-WoodAveE-To-End -Top
Crdr-12-WoodAveE-To-End-BaseCourse	
Crdr-12-WoodAveE-To-End -Datum	
Crdr-12-WoodAveE-To-End -PipeDatum	
Crdr-12-WoodAveE-To-End -Top	
Ex-North	
Ex-South	
Exist	
Grdg-Int-12-BB-NE-Sdwk	
Grdg-Int-12-BB-NW-Sdwk	
Rfnt-12-Begin-To-WoodAveE-BaseCourse	
Rfnt-12-Begin-To-WoodAveE-Datum	
Rfnt-12-Begin-To-WoodAveE-PipeDatum	

FILE CABINET

When DOT personnel access file cabinet to create a project directory, the project name must start with a 2-character prefix that identifies the organization or group that created the project followed by an underscore ("_").

The assigned prefixes for each group are listed below.

Organization Prefixes

Organization	Project Name Prefix
District 1	D1__
District 2	D2__
District 3	D3__
District 4	D4__
District 5	D5__
District 6	D6__
District 7	D7__
District 8	D8__
Surveying & Mapping	SY__
Bureau of Project Development	DE__
Bureau of Highway Operations/Traffic	TR__
Bureau of Structures	BR__
Materials	MT__
Planning	PL__
Aeronautics	AE__
Mapping Project	MP__
Graphics-Audio Visual	GS__
Systems Engineering	SE__
Applications Programming	AP__
Facilities Management	FM__

EXAMPLE

Design Project Number 3082-00-00

PROJECT DIRECTORY NAME CONVENTION

Project Name = D1_30820000

Project Title = USH 18, Jefferson-Sullivan, Jefferson County

Project Description = REC 2 Project with minor Realignment

(250 characters max)

PROJECT FILE NAME CONVENTION

Title Sheet	010101 ti
General Notes	020101 gn
Project Overview	020201 po
Typical Sections	020301 ts
Construction Details	021001 cd
Intersection Details	021101 id
Plan Details	021201 pd
Joint Details	021301 jd
Freeway Mgt System	021401 fm
Interchanges	021501 ic
Contour Maps	021601 cm
Cross Section Matchlines	021701 xm
Erosion Control	022001 ec
Storm Sewer Plan	022501 ss
Pipe Underdrain	022601 pu
Utility Plan	023001 up
Planting	023101 pl
Permanent Signing	023201 ps
Advanced Warning Signing	023301 aw
Lighting Plan	023501 lp
Traffic Signal Plan	024001 sp
Traffic Signal Phasing	024101 ph
Cable Routing Chart	024201 cr
Pavement Marking	024501 pm
Traffic Control	025001 tc
Stage Construction	026001 s1
Stage Construction (additional)	026101 s2
Detours	027001 dt
Fencing	027101 fn
Alignment	027201 ad
Borings, Other, etc.	027301 xx
Estimate of Quantities	030101 eq
Miscellaneous Quantities	030201 mq
Right-of-Way Plat	040101 rp
Plan and Profile	050101 pp
Plan Sheets	050201 pn
Profiles	050301 pr
Line Diagram	050401 ld
Special Sign Details	070101 sd
CAiCE Earth Quantities	090101 ew

CAiCE Cross Sections
Access Control Plan

090201 xs
090301 ac

MicroStation DGN Base File Naming Standard;

Data:	File Name:	Description:
Alignment	aliml.dgn	Mainline alignment all scales on appropriate level.
	alistr.dgn	Side road alignment all scales on appropriate level.
Erosion control	ec.dgn or ec1,2,...	Proposed erosion control data. Proposed stage erosion control data.
Fencing	fence.dgn	Proposed fencing.
FTMS	ftms.dgn	Proposed freeway traffic management system data.
Geometry	pavt.dgn or pavts1,2,...	Proposed pavements. Proposed stage pavements.
Joints	joints.dgn	Proposed pavement joints.
Mapping	9123124.dgn Strip#, photo#, photo#.dgn or 9123124stc.dgn	Mapping from aerial flights. A file with a name which is all numeric such as 9123124.dgn is a WSPCS file. A file with a name with three letters preceding the period is a WCCS file.
Lighting (freeway)	ltg.dgn	Proposed lighting data.
Pavement marking	pm.dgn	Proposed pavement marking data.
Permanent signing	ps.dgn	Proposed permanent signing.
Planting	plant.dgn	Proposed planting/landscaping data.
Profile	profml.dgn	Mainline existing and proposed profile vertical alignment.
	profxxx.dgn	Side road existing and proposed profile vertical alignment, named based on road name (ex: profelm.dgn).
Right-of-Way	rwpr.dgn rwex.dgn rwsec.dgn rwpl.dgn rwpp.dgn	Proposed Right-of-Way from TSS. Existing Right-of-Way from TSS. Section Lines from TSS. Property Lines from TSS. Property Pipes from TSS.
Slope intercepts	si.dgn	Slope Intercepts.
Storm sewer	ss.dgn	Proposed storm sewer layout.
Topography	topo.dgn	50 scale existing topography collected from field survey. Add _ scale for additional scales.
Traffic Signals	s1234.dgn	Traffic signal data, named by signal number.
Traffic control/ Stage construction	tc.dgn or tcs1,1a,2,...	Traffic control data. Stage construction layouts.
Utilities	uti.dgn	50 scale existing utilities collected from filed survey. Add _ scale for additional scales.